

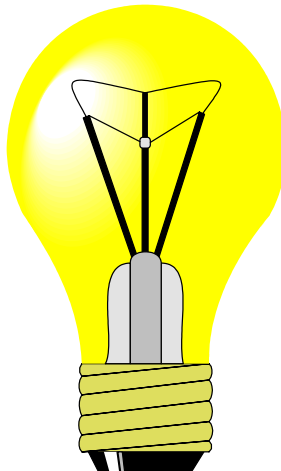


Department of Labor & Economic Growth

ELECTRICAL CODE RULES

Part 8

INCORPORATING THE **2002** EDITION OF
THE NATIONAL ELECTRICAL CODE



BUREAU OF CONSTRUCTION CODES & FIRE SAFETY
P.O. Box 30254
Lansing, Michigan 48909
www.michigan.gov/bccfs

Providing for Michigan's Safety in the Built Environment

INTRODUCTION

The Bureau of Construction Codes and Fire Safety has amended the Construction Code Rules, Part 8. All units of government that administers and enforces the electrical code shall enforce the amended state electrical code effective February 29, 2004.

The rules adopt by reference the National Electrical Code, 2002 edition, and include deletions, additions, and amendments to the national code. The deletions, additions, and amendments are set forth in this publication.

How to use this publication: The state electrical code rules are published in code section order for use with the National Electrical Code, 2002 edition.

The National Electrical Code, 2002 edition, is adopted by reference in R 408.30801 (page 1). The provisions set forth in this publication are either added to the national code or amend the national code.

Each section has been provided with a title for indexing purposes. These titles may not be identical to the titles used in the promulgated rule set.

Additional copies of the rules are available from the Michigan Department of Labor & Economic Growth, Bureau of Construction Codes and Fire Safety, P.O. Box 30255, Lansing, Michigan 48909 for a cost of \$2.50. The National Electrical Code may be purchased from the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02269, or from the Michigan Department of Labor and Economic Growth, Bureau of Construction Codes and Fire Safety (BCCFS), P.O. Box 30255, Lansing, MI 48909, at a cost as of the time of adoption of these rules of \$60.00 each. A copy of the state amendments will be included with the purchase of the National Electrical code from BCCFS. Please make checks payable to the State of Michigan.

TABLE OF CONTENTS

Construction Code	1
Part 8 - Electrical Code	1

ARTICLE 80 - ADMINISTRATION AND ENFORCEMENT

80-1	Scope	2
80.1.1	Intent	2
80.1.2	Severability	2
80.1.3	Code conformity required	2
80.3	Purpose	2
80.13	Authority	2
80.14	Duties and powers of the code official	2
80.15	Means of appeal	3
80.15.1	Limitation of authority	3
80.18	Maintenance of existing wiring	3
80.18.1	Disconnection of dangerous electrical equipment	3
80.19	Permits and certificates	3
80.19.1	To whom permits are issued	4
80.19.2	Application for permit.....	4
80.19.3	Permit expiration	5
80.19.4	Uncompleted installation notification	5
80.19.5	Inspection and refunds for partial installation	5
80.19.6	Owner notification to enforcing agency.....	5
80.19.7	Transfer of permit	5
80.19.8	Fraudulent application for permit	5
80.20	Representative on jobsite	5
80.20.1	Licensed supervision required	6
80.21	Plans and specifications	6
80.21.1	Preparation of plans	6
80.21.2	Review of construction documents	6
80.22	Scheduling inspection.....	7
80.22.1	Inspection notice	7
80.22.2	Concealing electrical installation	7
80.23	Violations	7
80.24	Fees	7
80.25	Connection to electricity supply	7
80.26	Service equipment.....	7

ARTICLE 90 - INTRODUCTION

90-3	Code arrangement	7
90-4	Enforcement	8
90-6	Formal interpretations.....	8

ARTICLE 100 - DEFINITIONS	8
--	---

ARTICLE 110 - REQUIREMENTS FOR ELECTRICAL INSTALLATIONS	
110.2 Approval	9
ARTICLE 250 - GROUNDING	
250-118 Types of equipment grounding conductors.....	9
ARTICLE 300 - WIRING METHODS	
300-3(b)(5) Grounded and ungrounded conductor sources	10
ARTICLE 350 - FLEXIBLE METAL CONDUIT	
350-14 Grounding of flexible metal conduit	10
ARTICLE 351 - LIQUIDTIGHT FLEXIBLE METAL CONDUIT AND LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT	
350.13 Grounding of liquidtight flexible metal conduit	10
ARTICLE 760 - FIRE ALARM SYSTEMS	
760-11 Fire alarm monitoring.....	10

DEPARTMENT OF LABOR AND ECONOMIC GROWTH

DIRECTOR'S OFFICE

CONSTRUCTION CODE

These rules take effect February 29, 2004.

(By authority conferred on the director of the department of labor and economic growth by section 4 of 1972 PA 230, MCL 125.1504, and Executive Reorganization Order Nos. 1996-2 and 2003-18, MCL 445.2001 and 445.2011)

R 408.30801, R 408.30807, R 408.30815, R 408.30817, R 408.30818, R 408.30819, R 408.30820, R 408.30822, R 408.30824, R 408.30826, R 408.30827, R 408.30835, R 408.30868, and R 408.30869 of the Michigan Administrative Code are amended and R 408.30808, R 408.30809, R 408.30810, R 408.30811, R 408.30812, R 408.30813, R 408.30814, R 408.30823, R 408.30828, and R 408.30829 are added to the Code and R 408.30816, R 408.30831, R 408.30837, R 408.30843, and R 408.30866 are rescinded as follows:

PART 8. ELECTRICAL CODE

Rule 801. National Electrical Code; adoption by reference; inspection; purchase. The standards contained in the national electrical code, 2002 edition, except sections 80.2, 80.5, 80.7, 80.17, 80.27, 80.29, 80.31, 80.33, 80.35, 90.1, 90.5, and 547.1 to 547.10, as published by the national fire protection association, shall govern the installation, replacement, alteration, relocation, and use of electrical systems or material. With the exceptions noted, the national electrical code is adopted in these rules by reference. Fine print notes contained within the body of the code are not adopted as a part of the code. All references to the ANSI/ASME A17.1-1996, Safety Code for Elevators and Escalators means the Michigan Elevator Code and all references to the National Electrical Code means the Michigan Electrical Code. The code is available for inspection at the Okemos office of the department of labor and economic growth, bureau of construction codes and fire safety. The National Electrical Code may be purchased from the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02269, or from the Michigan Department of Labor and Economic Growth, Bureau of Construction Codes and Fire Safety, 2501 Woodlake Circle, Okemos, Michigan 48864, at a cost as of the time of adoption of these rules of \$60.00 each.

R408.30801

Rule 805. Rescission Rules 41 through 77 of the rules of the electrical administrative board, being R338.1041 to R 338.1077 of the Michigan Administrative Code, are rescinded.

R 408.30805

TITLE

Rule 807. Title These rules shall be known as the Michigan electrical code, hereinafter referred to as "the code."
R 408.30807

ARTICLE 80 ADMINISTRATION AND ENFORCEMENT

80.1. Scope. The code regulates the design, installation, maintenance, alteration, and inspection of electrical systems including all wiring, fixtures, appliances, and appurtenances in connection with the utilization of electrical energy, within or on a building, structure, or properties, and including service entrance wiring as defined by the code.

Exception: Electrical wiring and equipment within 1- and 2-family dwellings shall be constructed, installed, and maintained in accordance with the Michigan residential code.

80.1.1. Intent. The purpose of the code is to provide minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, installation, quality of materials, location, operation, and maintenance or use of electrical wiring and equipment.

80.1.2. Severability. If a section, subsection, sentence, clause, or phrase of the code is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of the code.

80.1.3. Code conformity required. A person shall not install, alter, maintain, service, or repair, or cause or permit the installation, altering, maintaining, servicing, or repairing of electrical equipment in or on any building, structure, or part thereof, or on any premises, if by the person's action the work does not conform to the provisions of the code.
R 408.30808

80.3. Purpose. The purpose of this article shall be to provide requirements for administration and enforcement of the Michigan electrical code.
R 408.30809

80.13. Authority. Where used in the code, "authority having jurisdiction" means the enforcing agency in accordance with 1972 PA 230, MCL 125.1501 et seq., as defined in R 408.30828. The code shall be administered and enforced by the enforcing agency in accordance with 1972 PA 230, MCL 125.1501 et seq.
R 408.30810

80.14. Duties and powers of the code official. The code official shall enforce the provisions of the code and shall act on any question relative to the installation, alteration, repair, maintenance, or operation of electrical wiring and equipment, except as otherwise specifically provided for by statute.
R 408.30811

80.15. Means of appeal. A person may appeal a decision of the enforcing agency to the board of appeals. An application for appeal shall be based on a claim that the true intent of the code or the rules governing construction have been incorrectly interpreted, the provisions of the code do not apply, or an equal or better form of construction is proposed. The application shall be filed under section 14 of 1972 PA 230, MCL 125.1501 et seq.

80.15.1. Limitation of authority. The board of appeals shall have no authority relative to interpretation of the administration of the code nor shall such board be empowered to waive requirements of the code.

R 408.30812

80.18. Maintenance of existing wiring. Every building, structure, or part thereof shall be kept in good electrical repair by the owner.

R 408.30815

R 408.30816 Rescinded.

80.18.1. Disconnection of dangerous electrical equipment. If the use of any electrical equipment is found imminently dangerous to human life or property, the enforcing agency may condemn the equipment or disconnect it from its source of electric supply, except that the enforcing agency shall not disconnect the service entrance equipment or utility service drop wires unless the entrance equipment or utility wires in themselves constitute a hazard to life or property. If the enforcing agency condemns or disconnects dangerous equipment, then the agency shall place a red tag on the equipment listing the causes for the condemnation or disconnection and the penalty under the act for the unlawful use of the equipment. The agency shall give written notice of the condemnation or disconnection and the causes for condemning or disconnecting the equipment to the owner or the occupant of the building, structure, or premises. A person shall not remove the tag or reconnect the electrical equipment to its source of electric supply, or use or permit the use of electrical current in the electrical equipment, until the causes for the condemnation or disconnection are remedied and a permit for the electrical repairs of the equipment is obtained from the enforcing agency.

R 408.30817

80.19. Permits and certificates. A person shall not equip a building with electrical conductors or equipment or make an alteration of, change in, or addition to, electrical conductors or equipment without receiving a written permit to do the work described. If the electrical installation or alterations of, changes in, or addition to, electrical conductors or equipment are found to be in compliance with the provision of the code and if the work has passed the inspection of the enforcing agency, then the enforcing agency shall, upon the request of the permit holder to whom the permit was issued, issue a certificate of final electrical inspection. The certificate certifies that the provisions of the code have been complied with. This section does not apply to installations that are referred to in section 7(3)(a), (b), (c), (d), (e), (f), (h), (k), (l), or (n) of 1956 PA 217, MCL 338.887(3)(a), (b), (c), (d), (e), (f), (h), (k), (l), or (n).

80.19.1. To whom permits are issued. (1) To obtain an electrical permit, an applicant shall be 1 of the following:

(a) A holder of an electrical contractor license or the qualifying master for the electrical contractor when authorized by the electrical contractor to secure a permit.

(b) A person, firm, or corporation holding an affidavit as provided by R 338.1039a.

(c) A homeowner who occupies or will occupy a single-family dwelling and other accessory structures located on the same lot intended for use by the homeowner for which the permit is obtained and who will install the electrical equipment as certified by the homeowner on the permit application in accordance with section 10(4) of 1972 PA 230, MCL 125.1510(4).

(2) To obtain a permit for a fire alarm system, as defined in section 1a(1) of 1956 PA 217, MCL 338.881a (1), an applicant shall be 1 of the following:

(a) A holder of an electrical contractor license.

(b) A holder of a fire alarm specialty contractor license or the qualifying fire alarm specialty technician qualifying the fire alarm specialty contractor when authorized by the fire alarm specialty contractor to secure a permit.

(c) A homeowner qualifying under section 80-19.1(1)(c) of the code.

(3) To obtain a permit for an electrical sign or outline lighting, as defined in section 1b(1) and (2) of 1956 PA 217, MCL 338.881b(1) and (2), an applicant shall be 1 of the following:

(a) A holder of an electrical contractor license.

(b) A holder of a sign specialty contractor license or the sign specialty technician qualifying the sign specialty contractor when authorized by the sign specialty contractor to secure a permit.

(c) A homeowner qualifying under section 80.19.1(1)(c) of the code.

(4) To obtain a permit for electrical wiring associated with the installation, removal, alteration, or repair of a water well pump on a single-family dwelling to the first point of attachment in the house from the well, an applicant shall be 1 of the following:

(a) A holder of an electrical contractor license.

(b) A registered pump installer under part 127 of 1978 PA 368, MCL 333.12701 to 333.12771.

(c) A homeowner qualifying under section 80.19.1(1)(c) of the code.

(5) To obtain a permit for wiring associated with existing mechanical and plumbing systems referenced in section 7(3)(i) of 1956 PA 217, MCL 338.887(3)(i), a person shall be 1 of the following:

(a) A holder of an electrical contractor license or the qualifying master for the electrical contractor when authorized by the electrical contractor to secure a permit.

(b) A holder of a mechanical contractor license issued in accordance with section 6(3)(a), (b), (d), (e), and (f) of 1984 PA 192, MCL 338.976(3)(a), (b), (d), (e), and (f).

(c) A holder of a plumbing contractor license issued in accordance with 2002 PA 733, MCL 338.3511 et seq.

80.19.2 Application for permit. To obtain an electrical permit, the applicant shall file the application in writing on a form furnished by the enforcing agency for that purpose. The application shall include all of the following:

(1) A description of the work to be covered by the permit for which application is made.

- (2) Description of the land upon which the work is to take place by legal description, street address, or similar description that will readily identify and definitively locate the proposed building or work.
- (3) Be accompanied by construction documents in accordance with section 80.21 of the code.
- (4) Signature of the applicant.

80.19.3. Permit expiration. If work for which a permit is issued is not started within 6 months of the date of permit issuance or if work is abandoned for a period of 6 months, then the permit shall lapse and cease to be in effect. The enforcing agency shall provide notice of this requirement to the permit holder.

80.19.4. Uncompleted installation notification. If a person to whom a permit is issued for the installation and inspection of electrical conductors and electrical equipment quits the installation for any reason, then the person shall notify the enforcing agency.

80.19.5. Inspection and refunds for partial installation. If an installation is partially completed, then a permit holder, upon quitting the installation, shall notify the enforcing agency and shall request an inspection. The inspector shall record the acceptance of, or violations against, the work installed on the permit record according to the findings of the inspector. The enforcing agency shall not grant a refund to the permit holder of the permit fee covering electrical equipment installed and inspected.

80.19.6. Owner notification to enforcing agency. If a permit holder quits an installation after the electrical equipment is installed and fails to notify the enforcing agency, then the building owner or his or her agent may notify the enforcing agency and request inspection. Upon inspection, the enforcing agency shall send the permit holder a notice of a violation. The owner may then secure another licensed contractor to proceed with the work if the new contractor is properly covered by a permit.

80.19.7. Transfer of permit. An electrical permit is not transferable.

80.19.8. Fraudulent application for permit. A permit that is issued in violation of the laws of this state or as a result of false or fraudulent information or misinterpretation of conditions is subject to revocation at the direction of the enforcing agency. The enforcing agency shall notify the person holding the permit to appear and show cause why the permit should not be revoked. Failure to appear is sufficient grounds for revocation of the permit.

R 408.30818

80.20. Representative on jobsite. The enforcing agency reserves the right to require a representative of the permit holder to be on the job when an inspection is made.

80.20.1. Licensed supervision required. A person who is licensed under 1956 PA 217, MCL 338.881 et seq., and who is employed by and represents the permit holder who is responsible for the electrical installation shall be present at all times when electrical construction is in progress.

R 408.30820

80.21. Plans and specifications. An applicant shall submit a detailed set of plans and specifications with the application for an electrical permit for any wiring or alteration to an electrical system if the system requires installation of electrical equipment that has an ampacity of more than 400 amperes for the service or feeder and if the calculated floor area in a building is more than 3,500 square feet. The enforcing agency may request plans for projects that include an unusual design. The electrical drawings shall include all of the following details:

- (a) Lighting layout.
- (b) Circuiting.
- (c) Switching.
- (d) Conductor and raceway sizes.
- (e) Wattage schedule.
- (f) Service location and riser diagram.
- (g) Load calculations.
- (h) A proposed method of construction that is drawn with symbols of a standard form.

All conductors are assumed to be copper unless otherwise stated in the plan. Specifications, when provided, shall also include the information listed in this rule. The selection of suitable disconnect and overcurrent devices to provide proper coordination and interrupting capacity for a wiring system is the responsibility of the designer. The enforcing agency, when approving electrical plans, does not assume responsibility for the design or for any deviations from any electrical drawings. The permit holder shall ensure that the plans and specifications approved by the enforcing agency, or a certified copy of the plans and specifications, where required, are available on the job for the use of the enforcing agency.

80.21.1. Preparation of plans. An architect or engineer shall prepare, or supervise the preparation of, all plans and specifications for new construction work or repair, expansion, addition, or modification work. The architect or engineer shall be licensed under 1980 PA 299, MCL 339.101 et seq. The plans and specifications shall bear the architect's or engineer's signature and seal.

Note: For exceptions, see 1980 PA 299, MCL 339.101 et seq.

80.21.2. Review of construction documents. The enforcing agency shall review the application, construction documents, and other data filed by an applicant for a permit. If the enforcing agency finds that the proposed work conforms to the requirements of the code and related laws and ordinances and that the fees are paid, then the agency shall issue a permit to the applicant.

R 408.30819

80.22. Scheduling inspection. An enforcing agency shall be given not less than 24 hours' notice to inspect electrical equipment. An enforcing agency shall perform the inspection within a reasonable period of time after the request for inspection is made.

80.22.1. Inspection notice. Only the enforcing agency shall post a notice of inspection at, or remove a notice from, the jobsite. The enforcing agency shall maintain a record of all inspections.

80.22.2. Concealing electrical installation. A person shall not conceal, or cause to be concealed, any conductors and equipment before the equipment is approved by the enforcing agency.
R 408.30822

80.23. Violations. If it is found that any electrical equipment does not conform to the provisions of the code, then the enforcing agency shall notify, in writing, the person who installs, or who is responsible for installing, the electrical equipment, in accordance with section 12(3) of 1972 PA 230, MCL 125.1512(3), of the defect, misuse, or violation. Violations and penalties shall be as specified in section 23 of 1972 PA 230, MCL 125.1523.
R 408.30826

80.24. Fees. The fees prescribed by section 22 of 1972 PA 230, MCL 125.1522, shall be paid to the enforcing agency of the jurisdiction before a permit to begin work for new construction, alteration, removal, demolition, or other building operation may be issued. In addition, an amendment to a permit necessitating an additional fee shall not be approved until the additional fee is paid.
R 408.30824

80.25. Connection to electricity supply. Except where work is done under an annual permit or except as otherwise provided in the code, a person, firm, or corporation shall not make connection to a supply of electricity or to supply electricity to any electric equipment installation for which a permit is required or that has been disconnected or ordered to be disconnected.
R 408.30823

80.26. Service equipment. The enforcing agency shall approve service equipment installed, altered, or repaired before the load side of the meter is energized.
R 408.30827

ARTICLE 90 INTRODUCTION

90.3. Code arrangement. The code includes an administration section. Additionally, the code is divided into the introduction and 9 chapters. Chapters 1, 2, 3, and 4 apply generally; chapters 5, 6, and 7 apply to special occupancies, special equipment, or other special conditions. Chapters 5, 6, and 7 supplement or modify the general rules. Chapters 1 to 4 apply except as amended by chapters 5, 6, and 7 for the particular conditions.

Chapter 8 covers communications systems and is not subject to the requirements of chapters 1 to 7 except where the requirements are specifically referenced in chapter 8.

Chapter 9 consists of tables.

Annexes are not part of the requirements of the code but are included for informational purposes only.

R 408.30813

90.4. Enforcement. The code is intended to be suitable for mandatory application by governmental bodies that exercise legal jurisdiction over electrical installations, including signaling and communications systems. The enforcing agency shall interpret the rules, decide on the approval of equipment and materials, and grant special permission set forth in the rules.

By special permission, the enforcing agency may permit alternative methods where equivalent objectives may be achieved by establishing and maintaining effective safety.

90.6. Formal interpretations. Formal interpretations shall be issued in accordance with 1972 PA 230, MCL 125.1501 et seq.

R 408.30814

ARTICLE 100 DEFINITIONS

100. Definitions. The definitions of authority having jurisdiction, dwelling unit, dwelling, 1-family, dwelling, 2-family, and dwelling, multifamily in article 100 of the code are amended and the definitions of chief electrical inspector, code official, electrical inspector, and enforcing agency are added to article 100 of the code to read as follows:

"Authority having jurisdiction" where used in the code means the enforcing agency.

"Dwelling unit" means a single unit providing complete independent living facilities for 1 or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation.

"Dwelling, 1-family" means a building that consists solely of 1 dwelling unit complying with the provisions of the Michigan residential code.

"Dwelling, 2-family" means a building that consists solely of 2 dwelling units complying with the provisions of the Michigan residential code.

"Dwelling, multifamily" means a building that contains 3 or more dwelling units. Residential occupancies containing more than 2 dwelling units where the occupants are primarily permanent in nature, including all of the following:

1. Apartment houses.
2. Boarding housing, not transient.
3. Convents.
4. Dormitories.
5. Fraternities and sororities.
6. Monasteries.

"Chief electrical inspector" where used in the code means the code official.

"Code official" means a person who is appointed and employed by a governmental subdivision who is charged with the administration and enforcement of the state code or codes, and who is registered in accordance with 1986 PA 54, MCL 338.2301 et seq.

"Electrical inspector" where used in the code means the code official.

"Enforcing agency" means the enforcing agency, in accordance with section 8a or 8b of 1972 PA 230, MCL 125.1501 et seq., which is responsible for administration and enforcement of the code within a governmental subdivision, except for the purposes of section 19 of 1972 PA 230, MCL 125.1501 et seq.

R 408.30828

ARTICLE 110 REQUIREMENTS FOR ELECTRICAL INSTALLATIONS

110.2. Approval. Materials, equipment, and devices shall be constructed and installed in accordance with approvals granted under section 21 of 1972 PA 230, MCL 125.1521, or by the code official.

R 408.30829

R 408.30831 Rescinded.

R 408.30837 Rescinded.

ARTICLE 250 GROUNDING

250.118. Types of equipment grounding conductors. The equipment grounding conductor run with or enclosing the circuit conductors shall be 1 or more or a combination of the following:

(1) A copper, aluminum, or copper-clad aluminum conductor. This conductor shall be solid or stranded; insulated, covered, or bare; and, in the form of a wire or a busbar of any shape.

(2) Rigid metal conduit.

(3) Intermediate metal conduit.

(4) Electrical metallic tubing.

(5) Flexible metallic tubing where the tubing is terminated in fittings listed for grounding and meeting both of the following conditions:

(a) The circuit conductors contained in the tubing are protected by overcurrent devices rated at 20 amperes or less.

(b) The length of flexible metallic tubing in the ground return path does not exceed 1.8m (6 feet).

(6) Armor of type AC cable as provided in section 320.108 of the code.

(7) The copper sheath of mineral-insulated, metal-sheathed cable.

(8) Type MC cable where listed and identified for grounding in accordance with both of the following:

(a) The combined metallic sheath and grounding conductor of interlocked metal tape-type MC cable.

(b) The metallic sheath or the combined metallic sheath and grounding conductors of the smooth or corrugated tube type MC cable.

(9) Cable trays as permitted by sections 392.3(c) and 392.7 of the code.

(10) Cablebus framework as permitted by section 370.3 of the code.

(11) Other electrically continuous metal raceways and auxiliary gutters listed for grounding.

R 408.30869

ARTICLE 300 WIRING METHODS

300.3(b)(5). Grounded and ungrounded conductor sources. Grounded and associated ungrounded circuit conductors for 2, 3, or 4-wire circuits shall all originate at the same source in the wiring system. A grounded conductor shall not be used for more than 1 multi-wire branch circuit.

R 408.30835

R 408.30866 Rescinded.

ARTICLE 348 FLEXIBLE METAL CONDUIT

350.14. Grounding of flexible metal conduit. The permit holder shall not use flexible metal conduit as a grounding means. If an equipment bonding jumper is required around flexible metal conduit, then the permit holder shall install the jumper in accordance with section 250.102 of the code.

R 408.30867

ARTICLE 350 LIQUIDTIGHT FLEXIBLE METAL CONDUIT AND LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT

350.13 Grounding of liquidtight flexible metal conduit. The permit holder shall not use liquidtight flexible metal conduit as a grounding means. If an equipment bonding jumper is required around liquidtight flexible metal conduit, then the permit holder shall install the jumper in accordance with section 250.102 of the code.

R 408.30868

R 408.30843 Rescinded.

ARTICLE 760 FIRE ALARM SYSTEMS

760.11 Fire alarm monitoring. The enforcing agency shall ensure that all fire-protective circuits are electrically or electronically monitored for integrity so that any malfunction of the system, such as an electrical open, a ground fault, or any short circuit fault on the main power supply, signaling line, or alarm-initiating devices or

fire safety control circuit, will indicate a visual and audible signal at the alarm panel when proper alarm operation would be prevented.

Exception 1: Interconnecting circuits of household fire-warning equipment that are wholly within a dwelling unit.

Exception 2: Fire safety control circuits that operate on loss of power to the auxiliary fire safety control relay are considered self-monitoring for integrity.

R 408.30873

INDEX

Administrative Rules

Application for permit	4
Authority	2
Code conformity required	2
Concealing electrical installation	7
Connection to electricity supply	7
Disconnection of dangerous electrical equipment	3
Duties and powers of the code official	2
Fees	7
Fraudulent application for permit	5
Inspection and refunds for partial installation	5
Inspection notice	7
Intent	2
Licensed supervision required	6
Limitation of authority	3
Maintenance of existing wiring	3
Means of appeal	3
Owner notification to enforcing agency	5
Permit expiration	5
Permits and certificates	3
Plans and specifications	6
Preparation of plans	6
Purpose	2
Representative on jobsite	5
Review of construction documents	6
Scheduling inspection	7
Scope	2
Service equipment	7
Severability	2
To whom permits are issued	4
Transfer of permit	5
Uncompleted installation notification	5
Violations	7

Technical Amendments

Approval	9
Code arrangement	7
Definitions	8
Enforcement	8
Fire alarm monitoring	10
Formal interpretations	8
Grounded and ungrounded conductor sources	10
Grounding of flexible metal conduit	10
Grounding of liquidtight flexible metal conduit	10
Types of equipment grounding conductors	9

NOTES

NOTES

Mailing Addresses:

P.O. Box 30254 (Codes: general correspondence)
P.O. Box 30255 (Codes: permits, licenses, and other documents containing payment)
P.O. Box 30700 (Office of Fire Safety)
P.O. Box 30704 (Office of Land Survey and Remonumentation)
P.O. Box 30222 (Office of Local Government and Consumer Services)
Lansing, Michigan 48909

Fax Numbers:

Administration - (517) 241-9570
Codes - (517) 241-9308
Fire Fighters Training Council - (517) 322-6540
Office of Fire Safety - (517) 322-1356
Office of Land Survey and Remonumentation - (517) 241-6301
Office of Local Government and Consumer Services - (517) 241-6371
Office of the State Fire Marshal - (517) 322-2908

Web site: www.michigan.gov/bccfs

Telephone Numbers:

Administration	517/241-9302
Office of Administrative Services (OAS)	517/335-2972
Office of Management Services (OMS)	517/241-9313
Boiler Division	517/241-9334
Building Division	517/241-9317
Electrical Division	517/241-9320
Elevator Safety Division	517/241-9337
Fire Fighters Training Council	517/322-5444
Mechanical Division	517/241-9325
Office of Fire Safety (OFS)	517/322-1123
Office of Local Government and Consumer Services (OLGCS)	517/241-9347
Office of Land Survey and Remonumentation (OLSR)	517/241-6300
Office of the State Fire Marshal	517/322-1924
Plan Review Division	517/241-9328
Plumbing Division	517/241-9330